

April 2023 (based on March 2023 Starts Stats)

# Construction Industry Snapshot

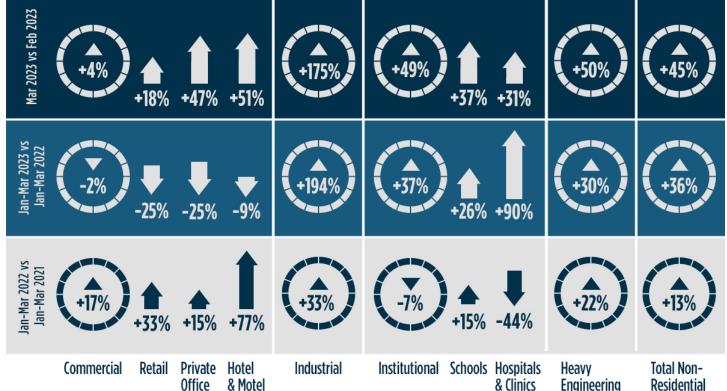


March's Nonresidential Construction Starts +45% M/M, +26% Y/Y, & +36% Ytd

ConstructConnect announced today that Mar 2023's volume of construction starts, excluding residential work, was \$47.6 billion, an increase of +45.0% versus Feb 2023's figure of \$32.8 billion.

Mar 2023 nonresidential starts compared with Mar 2022 were +25.5%. Grand total starts (i.e., including residential) in Mar 2023 were +37.3% m/m; -0.4% y/y; and +5.0% ytd.





#### March's Nonresidential Construction Starts +45% M/M, +26% Y/Y, and +36% Ytd

## Continuing Support from Megas and Semi-Megas

ConstructConnect announced today that March 2023's volume of construction starts, excluding residential work, was \$47.6 billion (*green shaded box, bottom of page 12*), an increase of +45.0% versus February 2023's figure of \$32.8 billion (originally reported as \$33.0 billion).

Launching in March were two mega-sized projects carrying a combined value of \$6.5 billion. Green-lighted were a Honda and LG Energy Solutions battery plant in Ohio, \$3.5 billion, and the Pikka North Slope oilfield development in Prudhoe Bay, Alaska, \$3.0 billion (see Top 10, page 9). Mega projects are defined as carrying estimated values of a billion dollars or more each.

February's mega project tally was two for \$3.6 billion; January's, three for \$14.6 billion. Looking at nonresidential starts in the first three months of this year exclusive of mega projects yields the following dollar volumes: January, \$42.6 billion; February, \$29.2 billion; and March, \$41.1 billion. January and March were basically a match, while February was a soft spot.

In the first quarter of last year, there was only one mega project start, \$2.0 for a wind farm in New York. From the second quarter of last year through to the end of 2022, however, there was a bursting forth of mega project initiations beyond what has ever been seen before.

Before leaving the subject of large projects, there's an interesting observation concerning the Top 10 Projects list on page 9 of this report. Yes, there are the two mega-sized undertakings already discussed, but among the other eight projects, there isn't a single one of them that is valued at less than half a billion. There continue to be sizable projects coming down the pipeline.

Returning to March 2023's total value of non-residential construction starts (i.e., 'megas' plus all others), they were +25.5% when compared with the same month of last year. And on a year-to-date basis, they were +35.7% versus the first quarter of 2022.

To complete the overview picture, the GRAND TOTAL dollar volume (i.e., adding residential to nonresidential activity) of starts in March 2023 was +37.3% m/m, -0.4% y/y, and +5.0% ytd.

## A Slightly Fading Pattern for Y/Y TTM Starts

Other statistics often beloved by analysts are trailing twelve-month (TTM) results and these are set out for all the various type-of-structure categories in Table 9 on page 12 of this report.

Grand Total TTM starts in March, on a month-to-month basis, stayed even, 0.0%, which was an improvement relative to February, when they were -0.6%, but a weakening from January, when they were +1.7%.

On a year-over-year basis, Grand Total TTM starts in March stayed bullish, but they also contributed to a fading pattern that has seen +20.5% in January relax to +18.2% in February and further backstep to +17.8% in the latest month.

# Residential's Grip on PIP Construction Slips

'Starts' compile the total estimated dollar value

Continued on page 3

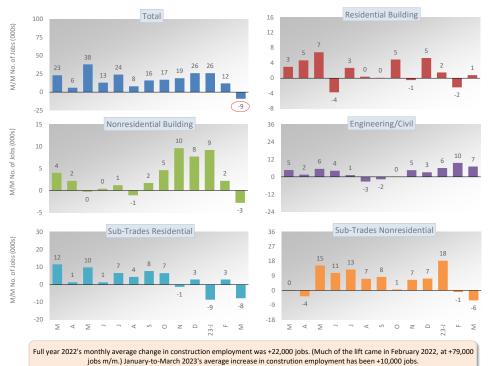
TABLE 1: VALUE OF UNITED STATES NONRESIDENTIAL CONSTRUCTION STARTS

— MARCH 2023 (ConstructConnect®)

	Jan-Mar 2023	Jan-Mar 23 vs	Mar 23 vs	Mar 23 vs
	(\$ billions)	Jan-Mar 22	Mar 22	Feb 23
Hotel/Motel	2.247	-9.2%	10.8%	51.1%
Retail/Shopping	3.045	-24.9%	-24.4%	18.0%
Parking Garage	0.348	-21.3%	83.3%	17.6%
Amusement	2.304	26.7%	93.4%	91.1%
Private Office	3.674	-24.6%	-24.6%	46.9%
Government Office	3.369	48.5%	19.8%	9.0%
Laboratory	0.920	66.1%	88.4%	560.2%
Warehouse	3.295	-42.1%	-40.2%	76.7%
Miscellaneous Commercial *	4.762	104.9%	16.7%	-73.4%
COMMERCIAL (big subset)	23.964	-2.2%	-3.0%	4.0%
INDUSTRIAL (Manufacturing)	22.663	193.6%	94.3%	174.7%
Religious	0.212	1.5%	-14.3%	15.3%
Hospital/Clinic	6.781	90.1%	-12.2%	31.2%
Nursing/Assisted Living	0.527	-56.6%	-31.6%	19.3%
Library/Museum	0.514	-47.2%	-60.8%	21.7%
Fire/Police/Courthouse/Prison	2.144	38.1%	98.8%	70.7%
Military	4.213	563.9%	447.3%	200.9%
School/College	18.893	26.3%	18.7%	37.3%
Miscellaneous Medical	1.229	-39.1%	-50.3%	3.2%
INSTITUTIONAL	34.514	37.3%	22.9%	49.4%
Miscellaneous Non-residential	1.527	-15.3%	-26.6%	21.3%
NONRESIDENTIAL BUILDING	82.668	39.8%	19.4%	41.1%
Airport	1.918	94.9%	37.0%	68.2%
Road/Highway	23.995	26.4%	10.8%	46.3%
Bridge	6.640	18.3%	39.2%	60.4%
Dam/Marine	2.168	7.1%	-27.0%	-26.9%
Water/Sewage	10.635	19.7%	14.1%	50.1%
Miscellaneous Civil (power, pipelines, etc.)	9.696	64.9%	259.9%	75.5%
HEAVY ENGINEERING (Civil)	55.053	29.9%	33.6%	49.8%
TOTAL NONRESIDENTIAL	137.721	35.7%	25.5%	45.0%

<sup>\*</sup> Includes transportation terminals and sports arenas.

## GRAPH 1: CHANGE IN LEVEL OF U.S. CONSTRUCTION EMPLOYMENT, MONTH TO MONTH (M/M) — TOTAL & BY CATEGORIES — MARCH 2023



For each month, 'net' = zero. 'Sub-trade' in BLS data referred to as 'specialty' trade

Data Source: Bureau of Labor Statistics (BLS)/Chart: ConstructConnect.

and square footage of all projects on which ground is broken in any given month. They lead, by nine months to as much as two years, put-in-place (PIP) statistics from the Census Bureau which are analogous to work-in-progress payments as the building of structures proceeds to completion.

PIP numbers cover the 'universe' of construction, new plus all manner of renovation activity, with residential traditionally (i.e., over the decade preceding the pandemic) making up two-fifths (about 40%) of the total and nonresidential, three-fifths (i.e., the bigger portion, at around 60%).

In 2021 and 2022, there were dramatic changes in the proportional shares of the total put-in-place dollar volumes taken by residential versus nonresidential. In 2021's full year PIP results, the relationship was about half and half, with residential at 49.4% and nonresidential, 50.6%. In 2022, residential finally succeeded in claiming the larger share of total, 50.7% to 49.4% for nonresidential.

This new relationship, given the higher interest rate regime, could not be expected to last. Higher interest rates, which harm affordability, have an almost immediate negative impact on housing demand. True to historical form, residential's year-to-date share of total PIP dollars through February of this year has retreated to 45.8%. (Through February of last year, its share was 51.1% of the total.)

The reported PIP numbers from the Census Bureau are always a month behind the 'starts' data. The total dollar volume of construction put-in-place through February of this year has been +5.9%, with residential in the doldrums at -5.1%, and nonresidential joyous, at +17.5%.

Nonresidential's leading sub-sector for year-to-date percentage change (2023/2022) has been manufacturing, +53.0%. Lodging has also experienced an out-sized jump, +38.8%. 'Commercial' (which is largely retail), 'highway and street', 'water delivery and treatment', and 'conservation and development' have all managed year-to-date climbs of about +20%, or one-fifth.

PIP numbers, being more spread out, have smaller peak-over-trough percent-change amplitudes than the 'starts' series. As an additional valuable service for clients and powered by its extensive 'starts' database, ConstructConnect, in partnership with Oxford Economics, a world-leader in econometric modeling, has developed put-in-place construction statistics by types of structure for U.S. states, cities and counties, actuals and forecasts. ConstructConnect's PIP numbers are being released quarterly and are featured in a separate reporting system.

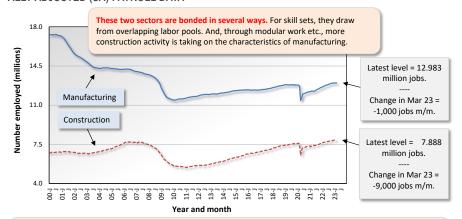
#### Construction's Jobs Count -9,000 in March

Construction's share of U.S. total non-farm employment in the monthly labor market report issued by the Bureau of Labor Statistics (BLS) is slightly more than 5.0%. Accordingly, to claim its rightful portion of March's +236,000 economy-wide number-of-jobs advance, the figure for construction would have needed to be +12,000. Instead, total construction employment was a disappointing -9,000 jobs. Much of the decline was attributable to staff trimming by residential and nonresidential sub-trade contractors, -8,000 and -6,000 jobs respectively (see Graph 1).

Construction's not seasonally adjusted (NSA) unemployment rate in March was 5.6%, down from February's 6.6%, and a little under year-ago March's 6.0%. With Spring underway, 'seasonality' (i.e., more activity due to warmer weather) will soon be working to the benefit of construction's unemployment rate (see the 'seasonal' pattern in Graph 3.)

March's NSA U rate for construction of 5.6% was higher

## GRAPH 2: U.S. MANUFACTURING VS CONSTRUCTION EMPLOYMENT MARCH, 2023-SEASONALLY ADJUSTED (SA) PAYROLL DATA

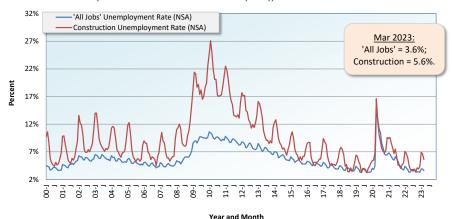


The not seasonally adjusted (NSA) unemployment rate for construction is presently 5.6%. In April 2020, at its worst, it was 16.6%. Manufacturing's current NSA jobless rate is a mere 2.9%. April 2020's extreme was 13.2%. In early 2000, the ratio of construction to manufacturing jobs was 0.4 to 1.0. Now, it's 0.6 to 1.0.

Latest data points are for March, 2023

Source: Payroll Survey, U.S. Bureau of Labor Statistics (BLS) / Chart: ConstructConnect-CanaData.

## GRAPH 3: U.S. UNEMPLOYMENT RATES: HEADLINE (I.E., 'ALL JOBS') & CONSTRUCTION (NOT SEASONALLY ADJUSTED (NSA))

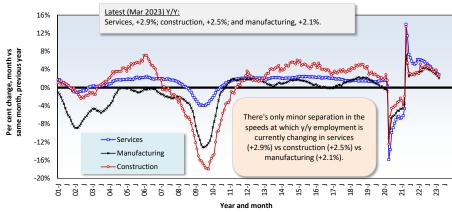


There used to be wide seasonal discrepancies between the unemployment rates for 'all jobs' and for construction, indicating that a career in the latter was more precarious. In recent times, though, the gap has largely disappeared, which should be a help in recruiting drives to sign up more onsite workers.

Current through March, 2023.

Data source: Bureau of Labor Statistics (BLS) / Chart: ConstructConnect.

## GRAPH 4: U.S. EMPLOYMENT MARCH 2023 — % CHANGE Y/Y BASED ON SEASONALLY ADJUSTED (SA) DATA



The latest data points are for March, 2023.

Data source: Payroll Survey, Bureau of Labor Statistics (U.S. Department of Labor)/Chart: ConstructConnect.

Continued on page 4

than the nation's 'all jobs' figure of 3.6%. It was also above manufacturing's 2.9%. Both the manufacturing and construction sectors are in the goods-producing segment of the economy (i.e., as opposed to private services-providing) and there is considerable overlap between their labor pools. Manufacturing's employment status in March was almost unchanged month to month, -1,000 jobs (see Graph 2).

In March, U.S. total employment was +2.7% year over year. 'Private services-providing' employment was ahead by a little more, +2.9% y/y. Construction's jobs count was +2.5% y/y and manufacturing's, +2.1% y/y. Setting the fastest year-over-year pace for jobs growth among all industrial sectors was 'leisure and hospitality', +6.3% (see Graph 5).

In other segments of the economy with close ties to construction, the latest y/y percentage changes in employment were as follows: architectural and engineering design services, +5.1%; oil and gas exploration and development, +4.4%; machinery and equipment rental and leasing, +4.2%; cement and concrete product manufacturing, +3.1%; real estate, +2.5%; and building materials and supplies dealers, -2.9%.

Design services work at architectural and engineering firms is a vital early-stage cog in the entire construction process that eventually leads to activity in the field. Therefore, the +5.1% y/y gain for jobs in the sector sends an upbeat message. Unfortunately, the Architecture Billings Index (ABI) from the American Institute of Architects (AIA) isn't singing quite the same cheery tune. For the fifth month in a row, the ABI stayed under 50 and in February, it pulled back to 48.0 from 49.3 in January. For reference, a figure of 50.0 is the pivot point for the ABI. Below it, revenues for design firms are shrinking; above it, they're expanding. The AIA's latest New Inquiries Index reading, however, is encouraging. Its current level is 55.0.

# Pluses and Minuses among Type-of-structure Sub-categories

The +45.0% month-to-month (m/m) upsurge in March's total nonresidential starts was, in large measure, due to an eye-catching bump-up delivered by the industrial sub-category (+174.7%). Engineering (+49.8%) and institutional (+49.4%) also lent strong helping hands. Commercial recorded an advance, but it was relatively minor (+4.0%).

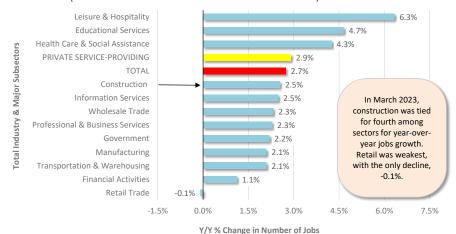
The +25.5% pickup in the dollar volume of total non-residential starts in March 2023 versus March 2022 (y/y) was also primarily thanks to industrial work (+94.3%), although engineering (+33.6%) and institutional (+22.9%) made significant contributions as well. Commercial was a backslider (-3.0%).

On a year-to-date (ytd) basis through the first three months of 2023, total nonresidential starts were ahead of 2022's Q1 dollar volume figure by more than a third (+35.7%). Again, it was industrial (+193.6%) in the forefront. Institutional (+37.3%) and engineering (+29.9%) were supportive sidekicks. Commercial (-2.2%) failed to make any headway.

There's a theme that's pervasive in the preceding three paragraphs. Of late, industrial (and, by extension, manufacturing) construction starts have been skyrocketing. The dollar volume of 2023's Q1 industrial starts was more than three times greater than the average for industrial starts for the five prior years, from 2018 to 2022 inclusive (see Graph 6).

Usually, about a third of all nonresidential starts derive from just two sub-category type-of-structure designations, 'roads/highways' and 'schools/colleges'. Their shares of total so far in 2023, at 17.4% and 13.7% respectively, have added to 31.1%.

## GRAPH 5: Y/Y JOBS CHANGE, U.S. TOTAL INDUSTRY & MAJOR SUBSECTORS — MARCH 2023 (BASED ON SEASONALLY ADJUSTED PAYROLL DATA)

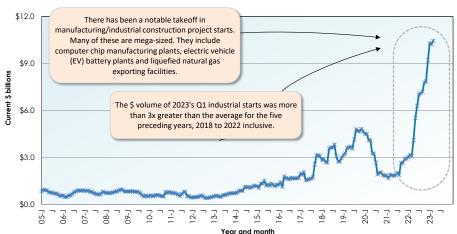


ent within the nandemic's initially hardest-hit sector. 'leisure & hospitality

 $\label{lem:march-2023's y/y changes in employment within the pandemic's initially hardest-hit sector, 'leisure \& hospitality', were: 'hotels/motels', +8.3%; 'amusements/gambling', +7.5%; and 'restaurants \& bars', +5.8%.$ 

Data source: Payroll Survey, U.S. Bureau of Labor Statistics (Dept of Labor)/Chart: ConstructConnect.

## GRAPH 6: U.S. MANUFACTURING/INDUSTRIAL CONSTRUCTION STARTS — CONSTRUCTCONNECT



The last data point is for March 2023

Data source: ConstructConnect. Graph: ConstructConnect.

TABLE 2: CONSTRUCTION STARTS IN SOME ADDITIONAL

TYPE OF STRUCTURE SUB-CATEGORIES — ConstructConnect®

	Jan-Mar 2023	% Change vs
	(\$ billions)	Jan-Mar 2022
Sports Stadiums/Convention Centers	\$1.105	-19.3%
Transportation Terminals	\$3.658	282.8%
Courthouses	\$0.441	6.0%
Police Stations & Fire Halls	\$1.053	59.0%
Prisons	\$0.650	36.9%
Pre-School/Elementary	\$5.753	18.2%
Junior & Senior High Schools	\$7.429	28.2%
K-12 (sum of above two categories)	\$13.182	23.7%
Special & Vocational Schools	\$0.250	-30.7%
Colleges & Universities	\$5.462	38.5%
Electric Power Infrastructure	\$3.196	3.3%

The three percentage-change metrics for street starts in March were +46.3% m/m, +10.8% y/y and +26.4% ytd. For educational facility starts, the results in the latest month were +37.3% m/m, +18.7% y/y, and +26.3% ytd. Further with respect to educational facilities, 'college and university' starts have stormed ahead most vigorously, +38.5% (see Table 2).

Important beyond roads within the engineering sub-category are 'water/sewage' and 'bridge' starts. The results for the former in March were +50.1% m/m, +14.1% y/y, and +19.7%ytd. For the latter, they were +60.4% m/m, +39.2% y/y, and +18.3% vtd.

February's three metrics for 'miscellaneous civil' starts, -which include power, railroad, and pipeline components, — were impressive across the board: +75.5% m/m, +259.9% y/y, and +64.9% ytd.

Important beyond schools in institutional are three medical sub-categories - i.e., 'hospitals/clinics', 'nursing/assisted living' and 'miscellaneous medical'. Their combined starts in March were +22.8% m/m, -26.5% y/y, and +25.6% ytd. The dollar volume of hospital project starts on their own year-todate has been +90.1%.

The military sub-category in March generated outstanding percentage-change results: +200.9% m/m; +447.3% y/y; and

Among commercial sub-categories in March, there were month-over-month increases of about +50.0% or more for 'hotels/motels', 'amusement', 'private offices', and 'warehouses'. 'Laboratories' were +560.2% m/m, but that was due to a low base figure. Nevertheless, the commercial subcategories with gains ytd is limited; 'amusement' (+26.7%); 'government offices' (+48.5%); 'laboratories' (+66.1%); and 'miscellaneous' (+104.9%). The latter owes its uptick to 'transportation terminals' (+282.8% ytd).

#### **JOLTS Results Reverse Plunge**

In January, the Jobs Openings and Labor Turnover Survey (JOLTS) report showcased the largest drop in construction job openings in the history of the series, dating back to December 2000. Some decline had been expected, with single-family housing starts on the wane, but not to the extent of -205,000. The latest JOLTS report, for February, confirms that there was something odd about January's number. Maybe some coverage was missed, or the seasonal adjustment factor was off. Anyway, in February, construction job openings climbed by +129,000, restoring more than half of January's supposed plunge.

Nevertheless, it does seem that openings and hires in construction are on a path that's moving sideways at best, slightly to the downside at worst, for now (see Graphs 7 and 8). As for openings and hires economy-wide, they are both clearly past their peak and moderating in readily discernible fashion.

#### **Trend Graphs Hold Their Ground**

Page 10 of this Industry Snapshot sets out the history, January 2005 to the present, of 12-month moving averages of 'starts', from ConstructConnect's database, for a dozen construction types-of-structure. The moving-average approach is designed to capture trends. As a technical note, the moving average is graphed in the ending month.

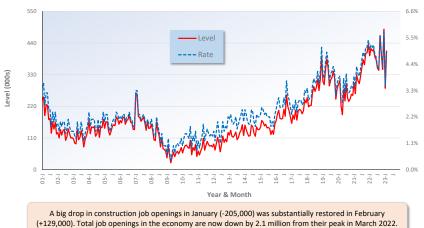
The key overview message is that there are only a couple of instances where the slopes of the trend graphs are obviously still falling, 'retail' and 'private offices' (see Graph 13). The slopes in all the other graphs are either climbing or more or less holding their ground.

#### **Construction Earnings Outstrip Inflation**

Tables B-3 and B-8 of the monthly Employment Situation report, from the BLS, record average hourly and average weekly wages for industry sectors. B-3 is for all employees

Continued on page 6

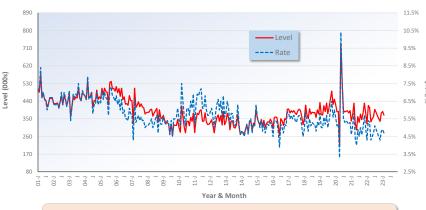
GRAPH 7: U.S. CONSTRUCTION JOB OPENINGS (FROM JOLTS REPORT) SEASONALLY ADJUSTED & ACTUALS (I.E., NOT SMOOTHED WITH MOVING AVERAGES)



\*Rate is number of job openings end-of-month as % of 'construction employment plus number of job openings'. Latest seasonally adjusted data points are for February 2023. ... JOLTS = Job Openings and Labor Turnover Survey.

Data source: Bureau of Labor Statistics (Dept of Labor)/Chart: ConstructConnect.

#### **GRAPH 8: U.S. CONSTRUCTION JOB HIRES (FROM JOLTS REPORT)** SEASONALLY ADJUSTED & ACTUALS (I.E., NOT SMOOTHED WITH MOVING AVERAGES)



The interest rate hikes have been slow to impact the labor market, but they are finally taking bites out of both openings and hires among 'all jobs' and in construction as a subset.

\*Rate is number of hires during month as % of construction employment. Latest seasonally adjusted data points are for February 2023. ... JOLTS = Job Openings and Labor Turnover Survey.

Data source: Bureau of Labor Statistics (Dept of Labor)/Chart: ConstructConnect.

(i.e., including bosses) on non-farm payrolls. B-8 is for 'production and non-supervisory personnel' only (i.e., it excludes bosses). For 'all jobs' and construction, there are eight percentage changes to follow.

From March 2023's Table B-3 (including bosses), y/y all-jobs earnings were +4.2% hourly and +3.3% weekly. Compensation hikes for construction workers, as a subset of 'all jobs', were better, at +5.4% hourly and +5.9% weekly. From Table B-8 for production and non-supervisory workers (i.e., excluding bosses), the y/y 'all-jobs' paycheck advances were +5.1% hourly and +4.5% weekly. Those substantial gains, though, were once again eclipsed by construction workers whose wages sped ahead by +6.6% y/y hourly and +7.4% y/y weekly.

The earnings of construction workers compare favorably, from a purchasing power point of view, with inflation. March's Consumer Price Index (CPI) numbers were +5.0% for 'all items' and +5.6% for 'core', which omits highly volatile food and energy items (see Graphs 9 and 10).

#### **Many Material Costs Plummet**

March 2023's y/y results for three building related BLS Producer Price Index (PPI) series were: (A) 'construction materials special index', -4.0% (little changed from February's -3.9%); (B) 'inputs to new construction index, excluding capital investment, labor, and imports', -3.8% (a significant drop from the previous month's +0.7%); and (C) 'final demand construction', designed to capture bid prices, +15.6% (a minor moderation from +16.1% in the period prior).

(A) comes from a data series with a long history, but it's confined to a limited number of major construction materials. (B) has a shorter history, but it's more comprehensive in its coverage, although it includes some items (e.g., transportation) that aren't strictly materials.

There are also PPI indices for specific construction inputs. There are only a few materials currently showing y/y price increases: cement, +17.0%; readymix concrete, +13.2%; and gypsum products, +9.9%. There are far more items with negative y/y price performances: softwood lumber, -49.3%; asphalt, -23.4%; diesel fuel, -19.4%; aluminum mill shapes, -13.0%; hot rolled steel bars, plates, and structural shapes, -8.9%; and copper wire and cable, -2.7%. Also, there's an 'inputs to highways and streets' index, -0.1%.

The value of construction starts each month is derived from ConstructConnect's database of all active construction projects in the U.S. Construct-Connect's non-residential construction starts series, because it is comprised of total-value estimates for individual projects, some of which are super-large, has a history of being more volatile than many other leading indicators for the economy.

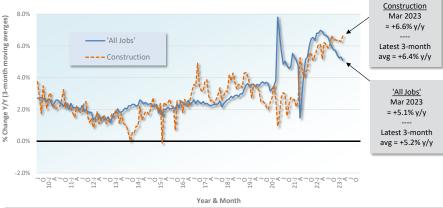
#### March 2023's 'Grand Total' Starts +5.0% Ytd

From Table 6 on page 8 (and also from Table 9 on page 12) of this report, ConstructConnect's total residential starts in March 2023 were +23.8% m/m, -30.0% y/y, and -29.5% ytd. Multi-family starts were +26.4% m/m, -22.2% y/y, and -19.1% ytd. Single-family starts were +22.4 m/m, -33.6% y/y, and -34.6% ytd. The reader will notice that the slide in residential starts took a pause in March. The month-to-month changes were consistently on the upside.

Including home building with all nonresidential categories, **Grand Total** starts in March 2023 were +37.3% m/m, -0.4% y/y, and +5.0% ytd.

ConstructConnect adopts a research-assigned 'start' date. In concept, a 'start' is equivalent to ground being broken for a project to proceed. If work is abandoned or re-bid, the 'start' date is revised to reflect the new information.

#### GRAPH 9: AVERAGE HOURLY EARNINGS Y/Y — 'ALL JOBS' & CONSTRUCTION

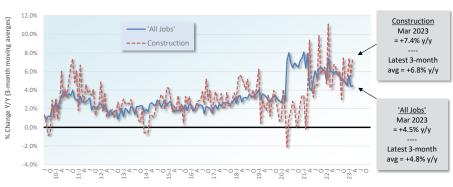


Y/y advances in hrly wages for 'all jobs' are in line with inflation (+5.0% for 'all items'; +5.6% for 'core'); construction, though, is charging ahead faster. Avg y/y hrly wage gains for construction workers, 2010-2019, were +2.3%; for 'all jobs', +2.4%.

From 'Production Workers and Non-supervisory Personnel' Table (B8). The latest data points are for March, 2023.

Data Source: Bureau of Labor Statistics (BLS)'s Employment Situation report/Chart: ConstructConnect.

#### GRAPH 10: AVERAGE WEEKLY EARNINGS Y/Y — 'ALL JOBS' & CONSTRUCTION



The economy is stumbling a bit as it contends with higher interest rates. But with Spring underway, 'seasonality' works to the benefit of construction activity. Currently, the NSA unemployment rate in construction is 5.6%; the 'all jobs' figure is 3.6%.

From 'Production Workers and Non-supervisory Personnel' Table (B8). The latest data points are for March. 2023.

Data Source: Bureau of Labor Statistics (BLS)'s Employment Situation report/Chart: ConstructConnect.

#### **Expansion Index Monitors Construction Prospects**

A rule of thumb is that nonresidential construction is a lagging indicator among economic measures. Companies are hesitant to undertake capital spending until their personnel needs are rapidly expanding and their office square footage or plant footprints are straining capacity. Plus, it helps if profits are abundant.

The 'rule' doesn't always hold true, however. For example, under present circumstances, weakness in some (mainly cyclical) areas of construction investment may well be offset by rich veins of large industrial and engineering projects.

Each month, ConstructConnect publishes information on upcoming construction projects at its Expansion Index web location, to be found by clicking on this link, <a href="https://www.constructconnect.com/expansion-index">https://www.constructconnect.com/expansion-index</a>

The Expansion Index, for hundreds of cities in the U.S. and Canada, calculates the ratio, based on dollar volume, of projects in the planning stage, at present, divided by the comparable figure a year ago. The ratio moves above 1.0 when there is currently a larger dollar volume of construction 'prospects' than there was last year at the same time. The ratio sinks below 1.0 when the opposite is the case. The results are set out in interactive maps for both countries.

#### **Three Key Project Stress Indicators**

The first two weeks of April saw a stream of mixed economic signals. Among the positives was a 5.0% U.S. inflation rate, the lowest in 2-years, and a hopeful sign that supply and demand are nearer a balance than they have been since mid-2020. Furthermore, the U.S. producer price index for construction material prices contracted in its latest reading, due to improved supply chain conditions over the last five months, as reported by the Kansas City Federal Reserve.

Unfortunately, other signals continue to cast a shadow, the most significant of which may have come from the Federal Reserve in its latest meeting minutes released to the public on April 12th. In those minutes, the Fed implied that the recent fallout from the banking crisis would likely push the economy into a recession sometime before 2024. Other financial measures of the economy also continue to flash warning signs. Business loans remain historically expensive which suppresses investments and purchases. Also, OPEC has made a surprise cut to oil production, lifting global prices and raising costs for families and businesses.

It is no wonder then that various market watchers have been warning of a forthcoming recession, to say nothing about the specifics of where the construction economy is headed. For this reason, ConstructConnect is leaning on its comprehensive database of historic and forthcoming projects to quantify construction project stress, and by extension the health of the industry.

Through early April 2023, our data suggest that the level of projects experiencing delayed bid dates remains well within cyclical norms. More interesting, though, is the modest decline in the recent level of projects that are on-hold concurrent with a mild elevation in the level of abandoned projects. While the database has a relatively short history, one theory being tested presently is that on-hold and abandoned levels move closely together unless a market correction is, or is about, to occur. In a market downturn, the level of abandoned projects would rise at the expense of the level of projects which are placed on-hold or delayed. ConstructConnect will continue to monitor each of these stress indicators and their relative behaviors as we seek to separate general market volatility from true signals of a market change.

Michael Guckes, Senior Economist

## GRAPH A: PROJECT STRESS INDEX: CIVIL AND BUILDING PROJECTS ROLLING 30-DAY AVERAGE OF INDEXED PROJECT COUNTS



## TABLE 3: 2023 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect®

	Jan-Mar 2023	% Change vs Jan-Mar 2022
1 Texas	\$27,236,928,041	79.9%
2 California	\$10,757,458,549	44.0%
3 New York	\$8,895,761,618	31.8%
4 Florida	\$8,199,382,720	50.5%
5 Ohio	\$6,586,493,222	139.7%
6 Alabama	\$4,296,795,852	203.9%
7 North Carolina	\$3,895,539,186	-19.9%
8 Georgia	\$3,768,754,005	73.7%
9 Indiana	\$3,462,098,256	34.2%
10 Alaska	\$3,453,067,407	1,361.0%
11 Pennsylvania	\$3,350,481,616	19.1%
12 Virginia	\$3,210,425,631	13.2%
13 Maryland	\$3,155,997,448	31.1%
14 Illinois	\$2,784,756,207	-28.5%
15 Arizona	\$2,588,768,802	65.4%
16 Michigan	\$2,472,639,434	-28.1%
17 Massachusetts	\$2,339,493,718	17.6%
18 Tennessee	\$2,154,899,084	-2.4%
19 Missouri	\$2,144,003,235	-19.7%
20 South Carolina	\$1,882,033,138	-4.8%

Figures are comprised of non-res building & engineering (residential is omitted).

## TABLE 4: 2023 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF NONRESIDENTIAL BUILDING CONSTRUCTION STARTS — ConstructConnect®

	Jan-Mar 2023	% Change vs Jan-Mar 2022
1 Texas	\$19,011,465,346	103.4%
2 New York	\$5,677,822,469	86.3%
3 California	\$5,310,111,840	17.7%
4 Ohio	\$4,943,606,080	229.3%
5 Florida	\$4,880,282,995	45.0%
6 Alabama	\$3,488,591,840	342.0%
7 Georgia	\$2,694,117,219	92.8%
8 North Carolina	\$2,468,087,856	-16.3%
9 Indiana	\$2,303,681,527	76.5%
10 Maryland	\$2,274,390,462	17.8%
11 Virginia	\$2,003,596,228	38.1%
12 Arizona	\$1,800,360,135	66.0%
13 Tennessee	\$1,719,366,451	3.5%
14 Massachusetts	\$1,718,269,625	11.9%
15 Pennsylvania	\$1,593,243,801	7.9%
16 Illinois	\$1,458,153,006	-31.3%
17 South Dakota	\$1,342,831,419	305.8%
18 Nebraska	\$1,214,423,442	144.3%
19 Utah	\$1,167,044,347	8.5%
20 Michigan	\$1,159,466,935	-41.9%

# TABLE 5: 2023 YTD RANKING OF TOP 20 STATES BY \$ VOLUME OF HEAVY ENGINEERING/CIVIL CONSTRUCTION STARTS — ConstructConnect®

111-7	TIETO T ENGINEERING/GIVIE GONGTHOOTIGH GIVING		oonoti dotoomicot
	_	Jan-Mar 2023	% Change vs Jan-Mar 2022
1	Texas	\$8,225,462,695	42.0%
2 (	California	\$5,447,346,709	84.2%
3 l	Florida	\$3,319,099,725	59.4%
4 /	Alaska	\$3,261,312,401	2,063.8%
5 l	New York	\$3,217,939,149	-13.0%
6 l	Pennsylvania	\$1,757,237,815	31.5%
7 (	Ohio	\$1,642,887,142	31.8%
8 l	North Carolina	\$1,427,451,330	-25.5%
9	Illinois	\$1,326,603,201	-25.1%
10	Michigan	\$1,313,172,499	-8.9%
11 \	Virginia	\$1,206,829,403	-12.9%
12	Indiana	\$1,158,416,729	-9.1%
13	Georgia	\$1,074,636,786	39.1%
14	Kansas	\$1,047,365,365	43.7%
15 l	Missouri	\$1,040,230,516	8.7%
16 \	Wisconsin	\$1,040,122,236	32.5%
17	Colorado	\$903,641,484	-11.1%
18 l	North Dakota	\$891,162,085	176.3%
19 l	Maryland	\$881,606,986	85.1%
20	Oklahoma	\$864,078,357	71.7%

Data source and Tables: ConstructConnect.

Alex Carrick is Chief Economist for ConstructConnect. He has delivered presentations throughout North America on the U.S., Canadian and world construction outlooks. Mr. Carrick has been with the company since 1985. Links to his numerous articles are featured on <a href="mailto:Twitter@ConstructConnx">Twitter@ConstructConnx</a>, which has 50,000 followers.

### **INSIGHT** view of starts statistics

TABLE 6: VALUE OF UNITED STATES CONSTRUCTION STARTS

ConstructConnect® INSIGHT VERSION — MARCH 2023

ARRANGED TO MATCH THE ALPHABETICAL CATEGORY DROP-DOWN MENUS IN INSIGHT

		lon Mar 2022	% Change	% Change	% Change
		Jan-Mar 2023 (\$ billions)	Jan-Mar 23 vs Jan-Mar 22	Mar 23 vs Mar 22	Mar 23 vs Feb 23
Summary		(ψ Βιιιιοτίο)	Odii-Mai 22	Widi ZZ	10020
CIVIL		55.053	29.9%	33.6%	49.8%
NONRESIDENTIAL BI	III DING	82.668	39.8%	19.4%	41.1%
RESIDENTIAL	DIEDING	63.591	-29.5%	-30.0%	23.89
GRAND TOTAL		201.311	5.0%	-0.4%	37.3%
		201.511	5.0%	-0.4%	37.37
Verticals	A transport	4.040	04.00/	27.00/	60.20
	All Others Civil	1.918	94.9%	37.0%	68.29
	All Other Civil	6.500	133.3%	555.8%	254.09
	Bridges	6.640	18.3%	39.2%	60.49
	Dams / Canals / Marine Work	2.168	7.1%	-27.0%	-26.99
	Power Infrastructure	3.196	3.3%	-1.4%	-55.79
	Roads	23.995	26.4%	10.8%	46.39
	Water and Sewage Treatment	10.635	19.7%	14.1%	50.19
CIVIL		55.053	29.9%	33.6%	49.89
	Offices (private)	3.674	-24.6%	-24.6%	46.99
	Parking Garages	0.348	-21.3%	83.3%	17.69
	Transportation Terminals	3.658	282.8%	95.9%	-81.99
Commer	cial (small subset)	7.679	22.4%	-6.7%	-48.79
	Amusement	2.304	26.7%	93.4%	91.19
	Libraries / Museums	0.514	-47.2%	-60.8%	21.79
	Religious	0.212	1.5%	-14.3%	15.39
	Sports Arenas / Convention Centers	1.105	-19.3%	-31.1%	32.49
Commun	•	4.135	-5.3%	6.9%	62.99
	College / University	5.462	38.5%	40.2%	26.79
	Elementary / Pre School	5.753	18.2%	-6.5%	24.39
	Jr / Sr High School	7.429	28.2%	32.8%	60.39
	Special / Vocational	0.250	-30.7%	-13.5%	-18.09
Educatio		18.893	26.3%	18.7%	37.39
	Courthouses	0.441	6.0%	163.1%	46.49
	Fire and Police Stations	1.053	59.0%	107.6%	95.99
	Government Offices	3.369	48.5%	19.8%	9.09
	Prisons	0.650	36.9%	62.7%	57.89
Governm	ent	5.513	44.2%	45.7%	30.09
	Industrial Labs / Labs / School Labs	0.920	66.1%	88.4%	560.29
	Manufacturing	22.663	193.6%	94.3%	174.79
	Warehouses	3.295	-42.1%	-40.2%	76.79
Industria	l .	26.878	92.5%	40.7%	163.89
	Hospitals / Clinics	6.781	90.1%	-12.2%	31.29
	Medical Misc.	1.229	-39.1%	-50.3%	3.29
	Nursing Homes	0.527	-56.6%	-31.6%	19.39
Medical		8.537	25.6%	-26.5%	22.89
Military		4.213	563.9%	447.3%	200.99
	Hotels	2.247	-9.2%	10.8%	51.19
	Retail Misc.	1.527	-15.3%	-26.6%	21.39
	Shopping	3.045	-24.9%	-24.4%	18.09
Retail		6.819	-18.1%	-13.5%	30.59
NONRESIDENTIAL B		82.668	39.8%	19.4%	41.19
	Multi-Family	24.054	-19.1%	-22.2%	26.49
	Single-Family	39.537	-34.6%	-33.6%	22.49
RESIDENTIAL		63.591	-29.5%	-30.0%	23.89
NONRESIDENTIAL		137.721	35.7%	25.5%	45.09
GRAND TOTAL		201.311	5.0%	-0.4%	37.39

Table 1 conforms to the type-of-structure ordering adopted by many firms and organizations in the industry. Specifically, it breaks nonresidential building into ICI work (i.e., industrial, commercial and institutional), since each has its own set of economic and demographic drivers. Table 6 presents an alternative, perhaps more user-friendly and intuitive type-of-structure ordering that matches how the data appears in ConstructConnect's on-line product 'Insight'.

## "Top Ten" projects of the month

TABLE 7: ConstructConnect's TOP 10 PROJECT STARTS IN MARCH 2023

LOCATION (EAST TO WEST)	TYPE OF CONSTRUCTION	DESCRIPTION	SQUARE FEET 000S*	DOLLARS 000,000S
<b>Maryland</b> Odenton	Institutional	East Campus Building 4 (ECB4) at Fort George G. Meade	864	\$698
		(6 structures) 830 Chisholm Ave US Army Corps of Engineers - Baltimore District		
North Bethesda	Residential	Strathmore Square (4 structures; 11 stories; 2000 units) Tuckerman Ln Fivesquares Development	1,900	\$550
<b>Virginia</b> Bristol	Commercial	Hardrock Resort & Casino Alterations 500 Gate City Hwy The United Company	*	\$500
<b>Georgia</b> Covington	Industrial	SK Group Semiconductor Plant (1 structure) 3000 Skc Dr Absolics Inc/SK Ecoengineering Inc	1,000	\$600
<b>Florida</b> Tampa	Residential	Gas Worx - Phase 1 (3 structures; 719 units) 1400 Channelside Dr Kettler	750	\$500
Ohio Washington Court House	Industrial	Honda LG Energy Solutions - Battery Plant Development (3 structures) Old US 35 LG Energy Solution	2,000	\$3,500
Illinois Chicago	Residential	Bronzeville Lakefront - Phase I (9 structures) 2960 S Ellis Ave McLaurin Development Partners	1,100	\$600
<b>Nebraska</b> Omaha	Commercial	Mutual of Omaha New Headquarters (1 structure; 44 stories) 215 S 15th St Hines - Corporate Office	800	\$600
<b>Texas</b> Austin	Civil/Engineering	IH 35 - Widen Road - Add Lanes (2 structures) I-35 Texas Department of Transportation (TxDOT) - Austin	*	\$607
<b>Alaska</b> Prudhoe Bay	Civil/Engineering	Pikka North Slope Oil Project (1 structure) Prudhoe Bay Santos / Oil Search (Alaska) LLC	*	\$3,000
TOTALS:			8,414	\$11,155

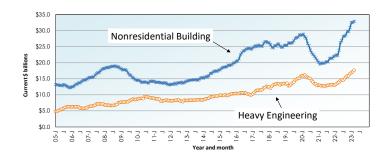
<sup>\*</sup>A square footage measure does not apply for alteration, some forms of industrial (e.g., petrochemical) and most engineering/civil work.

Source: ConstructConnect/Table: ConstructConnect.

9

## **Trend graphs for 12 key categories**

GRAPH 11: U.S. NONRESIDENTIAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



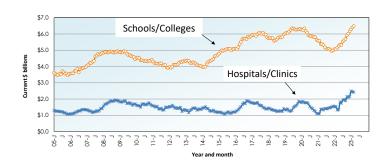
GRAPH 12: U.S. COMMERCIAL AND INSTITUTIONAL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



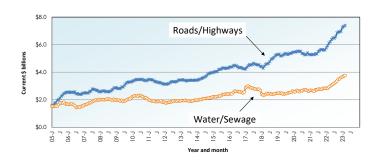
GRAPH 13: U.S. RETAIL AND PRIVATE OFFICE BUILDING CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



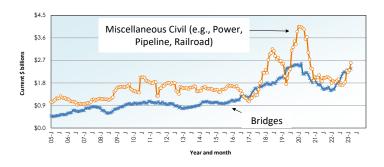
GRAPH 14: U.S. HOSPITAL/CLINIC AND SCHOOL/COLLEGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



GRAPH 15: U.S. ROAD/HIGHWAY AND WATER/SEWAGE CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



GRAPH 16: U.S. BRIDGES AND MISCELLANEOUS CIVIL CONSTRUCTION STARTS — ConstructConnect® (12-MONTH MOVING AVERAGES)



The last data points in all the graphs on this page are for March, 2023.

Source: ConstructConnect/Charts: ConstructConnect.

# **Regional starts table**

TABLE 8: U.S. YEAR-TO-DATE REGIONAL STARTS, NONRESIDENTIAL CONSTRUCTION\* — ConstructConnect®

	Jan-Mar 2022	Jan-Mar 2023	% Change
Connecticut	\$485,541,271	\$1,136,865,272	134.1%
Maine	\$532,046,769	\$201,372,915	-62.2%
Massachusetts	\$1,988,842,938	\$2,339,493,718	17.6%
New Hampshire	\$148,845,126	\$389,122,202	161.4%
Rhode Island	\$524,193,891	\$126,707,248	-75.8%
Vermont	\$71,203,304	\$116,265,751	63.3%
Total New England	\$3,750,673,299	\$4,309,827,106	14.9%
New Jersey	\$1,606,821,803	\$1,503,548,030	-6.4%
New York	\$6,749,176,487	\$8,895,761,618	31.8%
Pennsylvania	\$2,812,803,943	\$3,350,481,616	19.1%
Total Middle Atlantic	\$11,168,802,233	\$13,749,791,264	23.1%
TOTAL NORTHEAST	\$14,919,475,532	\$18,059,618,370	21.0%
Illinois	\$3,893,147,252	\$2,784,756,207	-28.5%
Indiana	\$2,579,073,910	\$3,462,098,256	34.2%
Michigan	\$3,437,225,325	\$2,472,639,434	-28.1%
Ohio	\$2,747,626,920	\$6,586,493,222	139.7%
Wisconsin	\$1,584,978,249	\$1,676,395,561	5.8%
Total East North Central	\$14,242,051,656	\$16,982,382,680	19.2%
lowa	\$772,398,711	\$1,162,468,235	50.5%
Kansas	\$1,101,819,947	\$1,425,793,906	29.4%
Minnesota	\$1,184,648,378	\$1,193,214,743	0.7%
Missouri	\$2,670,862,049	\$2,144,003,235	-19.7%
Nebraska	\$755,446,883	\$1,603,124,224	112.2%
North Dakota	\$758,725,428	\$979,555,346	29.1%
South Dakota	\$850,566,574	\$1,754,469,406	106.3%
Total West North Central	\$8,094,467,970	\$10,262,629,095	26.8%
TOTAL MIDWEST	\$22,336,519,626	\$27,245,011,775 \$292,676,135	22.0%
Delaware District of Columbia	\$185,596,245		57.7%
Florida	\$673,571,526	\$497,064,915	-26.2%
Georgia	\$5,448,914,376	\$8,199,382,720	50.5% 73.7%
Maryland	\$2,170,142,525 \$2,407,531,246	\$3,768,754,005 \$3,155,997,448	31.1%
North Carolina	\$4,864,340,197	\$3,895,539,186	-19.9%
South Carolina	\$1,976,416,072	\$1,882,033,138	-19.9%
Virginia	\$2,835,740,165	\$3,210,425,631	13.2%
West Virginia	\$382,549,243	\$554,046,186	44.8%
Total South Atlantic	\$20,944,801,595	\$25,455,919,364	21.5%
Alabama	\$1,413,693,898	\$4,296,795,852	203.9%
Kentucky	\$1,146,905,778	\$1,108,095,551	-3.4%
Mississippi	\$602,504,814	\$948,306,297	57.4%
Tennessee	\$2,208,316,099	\$2,154,899,084	-2.4%
Total East South Central	\$5,371,420,589	\$8,508,096,784	58.4%
Arkansas	\$695,148,036	\$1,429,016,744	105.6%
Louisiana	\$2,503,124,819	\$1,271,514,625	-49.2%
Oklahoma	\$1,065,567,712	\$1,614,667,704	51.5%
Texas	\$15,142,685,980	\$27,236,928,041	79.9%
Total West South Central	\$19,406,526,547	\$31,552,127,114	62.6%
TOTAL SOUTH	\$45,722,748,731	\$65,516,143,262	43.3%
Arizona	\$1,565,006,415	\$2,588,768,802	65.4%
Colorado	\$1,687,365,851	\$1,816,637,745	7.7%
Idaho	\$531,063,581	\$564,482,521	6.3%
Montana	\$310,498,834	\$350,367,957	12.8%
Nevada	\$1,238,456,116	\$905,364,429	-26.9%
New Mexico	\$409,290,594	\$695,271,725	69.9%
Utah	\$1,379,407,151	\$1,707,196,165	23.8%
Wyoming	\$308,556,886	\$453,530,538	47.0%
Total Mountain	\$7,429,645,428	\$9,081,619,882	22.2%
Alaska	\$236,349,657	\$3,453,067,407	1361.0%
California	\$7,468,649,210	\$10,757,458,549	44.0%
Hawaii		\$767,343,463	391.1%
_	\$156,248,531		
Oregon	\$1,288,641,061	\$1,032,134,741	-19.9%
Washington	\$1,288,641,061 \$1,966,128,766	\$1,032,134,741 \$1,808,282,536	-8.0%
Washington Total Pacific	\$1,288,641,061 \$1,966,128,766 \$11,116,017,225	\$1,032,134,741 \$1,808,282,536 <b>\$17,818,286,696</b>	-8.0% 60.3%
Washington	\$1,288,641,061 \$1,966,128,766	\$1,032,134,741 \$1,808,282,536	-8.0%

<sup>\*</sup>Figures above are comprised of non-res building and engineering (i.e., residential is omitted).

## **Detailed national table**

TABLE 9: VALUE OF U.S. NATIONAL CONSTRUCTION STARTS — MARCH 2023 — ConstructConnect® BILLIONS OF CURRENT \$\$, NOT SEASONALLY ADJUSTED (NSA)

	Jan 23	t month actua	Mar 23	Jan 23	3-months Feb 23	Mar 23	aced in end n Jan 23	12-months Feb 23	Mar 23	Year to D Jan-Mar, 2022	Jan-Mar, 2023
Single Family month-over-month % change	12.304 -7.2%	12.245 -0.5%	14.988 22.4%	12.910 -8.8%	12.605 -2.4%	13.179 4.6%	18.233 -2.8%	17.649 -3.2%	17.016 -3.6%	60.423	39.53
year-over-year % change Apartment	-33.8% 9.140	-36.4% 6.589	-33.6% 8.325	-34.4% 8.799	-33.8% 7.844	-34.6% 8.018	-15.4% 11.729	-18.9% 11.527	-21.5% 11.329	4.3% 29.751	-34.69 24.05
month-over-month % change	17.1%	-27.9%	26.4%	-19.7%	-10.9%	2.2%	-0.6%	-1.7%	-1.7%		
year-over-year % change TOTAL RESIDENTIAL	-8.9% 21.443	-26.9% 18.834	-22.2% 23.313	-10.2% 21.709	-13.5% 20.449	-19.1% 21.197	29.2% 29.962	26.2% 29.176	20.9% 28.345	34.7% 90.174	-19.1% 63.59°
month-over-month % change year-over-year % change	1.8% -25.1%	-12.2% -33.4%	23.8% -30.0%	-13.5% -26.3%	-5.8% -27.3%	3.7% -29.5%	-2.0% -2.2%	-2.6% -5.6%	-2.8% -8.7%	12.7%	-29.5%
Hotel/Motel	0.458	0.713	1.076	0.532	0.628	0.749	0.850	0.857	0.866	2.475	2.247
month-over-month % change year-over-year % change	-35.8% -47.3%	55.6% 12.4%	51.1% 10.8%	-29.5% -9.2%	17.9% -3.7%	19.3% -9.2%	-3.9% 33.1%	0.8% 29.5%	1.0% 25.4%	76.9%	-9.2%
Retail/Shopping	1.134	0.876	1.035	0.867	0.877	1.015	1.233	1.207	1.179	4.053	3.045
month-over-month % change year-over-year % change	82.7% -24.4%	-22.7% -25.9%	18.0% -24.4%	7.0% -12.1%	1.2% -18.2%	15.7% -24.9%	-2.4% 10.6%	-2.1% 5.7%	-2.3% 1.8%	33.3%	-24.9%
Parking Garages month-over-month % change	0.153 -27.7%	0.089 -41.7%	0.105 17.6%	0.181 23.0%	0.152 -16.3%	0.116 -23.5%	0.182 -2.5%	0.174 -3.9%	0.178 2.3%	0.442	0.348
year-over-year % change	-26.8%	-49.0%	83.3%	33.9%	-6.1%	-21.3%	24.6%	24.3%	35.5%	-29.8%	-21.3%
Amusement month-over-month % change	0.632 6.2%	0.574 -9.1%	1.097 91.1%	0.620 -5.7%	0.600 -3.2%	0.768 27.9%	0.675 4.0%	0.646 -4.4%	0.690 6.8%	1.818	2.304
year-over-year % change	96.8%	-38.2%	93.4%	66.5%	8.5%	26.7%	25.5%	11.6%	20.3%	22.2%	26.7%
Office month-over-month % change	1.396 43.3%	0.922 -33.9%	1.355 46.9%	1.257 -20.1%	1.098 -12.7%	1.225 11.6%	1.779 -0.3%	1.721 -3.2%	1.684 -2.1%	4.875	3.674
year-over-year % change	-4.6%	-42.8%	-24.6%	-34.4%	-27.0%	-24.6%	1.7%	-3.3%	-6.4%	14.9%	-24.6%
Governmental Offices month-over-month % change	1.113 11.7%	1.079 -3.1%	1.176 9.0%	1.026 -10.5%	1.063 3.6%	1.123 5.6%	1.146 2.9%	1.189 3.8%	1.206 1.4%	2.269	3.369
year-over-year % change Laboratories	53.1% 0.244	92.6% 0.089	19.8% 0.587	30.2% 0.218	57.1% 0.149	48.5% 0.307	16.2% 0.417	23.1% 0.411	23.9% 0.434	-1.0% 0.554	48.5% 0.920
month-over-month % change	111.0%	-63.5%	560.2%	-24.8%	-31.3%	105.1%	3.3%	-1.4%	5.6%	_	
year-over-year % change Warehouse	184.1% 1.551	-43.2% 0.630	88.4% 1.114	11.4% 1.485	0.4% 1.276	66.1% 1.098	103.0% 2.342	99.3% 2.251	109.8% 2.189	6.1% 5.690	66.1% 3.295
month-over-month % change	-5.8%	-59.4%	76.7%	-22.6%	-14.0%	-13.9%	-1.9%	-3.9%	-2.8%		
year-over-year % change Misc Commercial	-26.3% 0.887	-63.4% 3.062	-40.2% 0.814	-31.5% 0.837	-28.6% 1.623	-42.1% 1.587	-2.0% 1.051	-6.9% 1.224	-6.4% 1.234	-2.8% 2.324	-42.1% 4.762
month-over-month % change year-over-year % change	-3.8% 37.3%	245.3% 212.2%	-73.4% 16.7%	4.2% -53.6%	93.9% -15.8%	-2.2% 104.9%	1.9% -23.0%	16.5% -14.1%	0.8% -12.2%	58.9%	104.9%
TOTAL COMMERCIAL	7.569	8.035	8.360	7.023	7.466	7.988	9.675	9.682	9.661	24.499	23.964
month-over-month % change year-over-year % change	11.4% -4.6%	6.2% 1.0%	4.0% -3.0%	-13.3% -21.5%	6.3% -12.0%	7.0% -2.2%	-0.3% 5.9%	0.1% 3.9%	-0.2% 4.1%	17.0%	-2.2%
TOTAL INDUSTRIAL (Manufacturing)	15.947	1.792	4.924	12.637	11.776	7.554	10.285	10.246	10.445	7.718	22.663
month-over-month % change year-over-year % change	-9.3% 446.2%	-88.8% -20.8%	174.7% 94.3%	17.1% 379.4%	-6.8% 434.1%	-35.9% 193.6%	11.8% 240.9%	-0.4% 225.1%	1.9% 239.0%	32.6%	193.6%
Religious	0.063	0.070	0.080	0.063	0.063	0.071	0.084	0.087	0.085	0.209	0.212
month-over-month % change year-over-year % change	9.0% -20.2%	11.1% 87.1%	15.3% -14.3%	-30.8% -17.8%	0.7% 26.1%	12.0% 1.5%	-1.5% -18.8%	3.2% -14.5%	-1.3% -14.4%	-8.7%	1.5%
Hosptials/Clinics	4.646 131.8%	0.924 -80.1%	1.212 31.2%	2.771 5.1%	2.525 -8.9%	2.260 -10.5%	2.487 15.3%	2.438 -1.9%	2.424 -0.6%	3.567	6.781
month-over-month % change year-over-year % change	578.9%	-38.5%	-12.2%	96.3%	115.8%	90.1%	62.6%	58.5%	82.6%	-43.9%	90.1%
Nursing/Assisted Living month-over-month % change	0.259 6.4%	0.122 -52.7%	0.146 19.3%	0.208 -16.4%	0.208 0.0%	0.176 -15.6%	0.351 -4.2%	0.315 -10.4%	0.309 -1.8%	1.214	0.527
year-over-year % change	-41.4%	-78.1%	-31.6%	-35.3%	-52.6%	-56.6%	-28.6%	-39.7%	-36.5%	-9.1%	-56.6%
Libraries/Museums month-over-month % change	0.192 1.4%	0.146 -24.1%	0.177 21.7%	0.212 -30.5%	0.175 -17.4%	0.171 -2.3%	0.287 -1.1%	0.275 -4.3%	0.252 -8.3%	0.973	0.514
year-over-year % change	-16.2%	-50.3%	-60.8%	-19.8%	-41.8%	-47.2%	-5.1%	-11.7%	-23.3%	56.7%	-47.2%
Fire/Police/Courthouse/Prison month-over-month % change	0.632 7.2%	0.558 -11.7%	0.953 70.7%	0.689 -18.2%	0.593 -13.8%	0.715 20.4%	0.747 0.0%	0.757 1.3%	0.796 5.2%	1.552	2.144
year-over-year % change Military	0.7% 1.695	25.5% 0.628	98.8% 1.890	5.3% 0.945	-3.1% 0.860	38.1% 1.404	20.5%	22.3% 0.978	28.5% 1.107	-16.6% 0.635	38.1% 4.213
month-over-month % change	561.8%	-62.9%	200.9%	10.8%	-9.0%	63.3%	16.1%	4.2%	13.2%	_	
year-over-year % change Schools/Colleges	1157.7% 6.622	306.5% 5.172	7.100	37.1% 5.610	146.4% 5.740	563.9% 6.298	32.4% 6.285	41.2% 6.391	71.3% 6.484	-69.7% 14.964	563.9% 18.893
month-over-month % change	22.0%	-21.9%	37.3%	2.7%	2.3%	9.7%	2.1%	1.7%	1.5%	_	
year-over-year % change Misc Medical	30.3% 0.465	32.5% 0.376	18.7% 0.388	36.8% 0.468	34.3% 0.389	26.3% 0.410	24.0% 0.738	26.4% 0.724	25.9% 0.692	14.8% 2.018	26.3% 1.229
month-over-month % change year-over-year % change	42.5% -33.4%	-19.1% -30.1%	3.2% -50.3%	-0.3% -28.9%	-16.9% -41.3%	5.3% -39.1%	-2.6% 14.3%	-1.8% 13.1%	-4.5% 3.6%	35.4%	-39.1%
TOTAL INSTITUTIONAL	14.573	7.995	11.946	10.966	10.553	11.505	11.917	11.964	12.149	25.133	34.514
month-over-month % change year-over-year % change	60.3% 82.7%	-45.1% 7.6%	49.4% 22.9%	0.5% 34.1%	-3.8% 34.3%	9.0% 37.3%	4.8% 25.9%	0.4% 26.2%	1.5% 30.2%	-7.0%	37.3%
Misc Non Residential	0.642	0.400	0.485	0.549	0.525	0.509	0.653	0.645	0.631	1.802	1.527
month-over-month % change year-over-year % change	20.6% -0.9%	-37.7% -19.0%	21.3% -26.6%	0.9% 1.7%	-4.5% 0.5%	-3.0% -15.3%	-0.1% 20.4%	-1.2% 19.4%	-2.3% 14.2%	19.5%	-15.3%
TOTAL NON-RES BUILDING month-over-month % change	38.730	18.222	25.715	31.175	30.321	27.556	32.531	32.538	32.886	59.152	82.668
year-over-year % change	13.9% 98.9%	-53.0% 0.4%	41.1% 19.4%	2.7% 53.5%	-2.7% 59.0%	-9.1% 39.8%	5.2% 46.8%	0.0% 44.7%	1.1% 47.9%	7.0%	39.8%
Airports month-over-month % change	0.917 120.9%	0.373 -59.3%	0.628 68.2%	0.621 19.2%	0.569 -8.5%	0.639 12.5%	0.693 7.4%	0.709 2.3%	0.723 2.0%	0.984	1.918
year-over-year % change	165.1%	107.4%	37.0%	117.1%	115.8%	94.9%	53.4%	56.5%	52.4%	98.7%	94.9%
Roads/Highways month-over-month % change	8.846 118.9%	6.150 -30.5%	8.999 46.3%	5.978 20.8%	6.345 6.2%	7.998 26.0%	7.261 4.1%	7.321 0.8%	7.394 1.0%	18.987	23.995
year-over-year % change	62.7%	13.3%	10.8%	30.2%	33.0%	26.4%	25.9%	23.5%	21.1%	45.1%	26.4%
Bridges month-over-month % change	2.530 49.5%	1.578 -37.6%	2.532 60.4%	1.880 8.7%	1.934 2.9%	2.213 14.5%	2.315 1.2%	2.314 0.0%	2.374 2.6%	5.612	6.640
year-over-year % change Dams/Marine	14.7%	-0.6%	39.2%	18.4%	21.9%	18.3%	53.4%	49.3%	52.6%	13.5%	18.3%
month-over-month % change	0.505 -44.8%	0.961 90.3%	0.702 -26.9%	0.787 -15.8%	0.793 0.8%	0.723 -8.9%	0.771 -2.2%	0.823 6.7%	0.801 -2.6%	2.024	2.168
year-over-year % change Water/Sewage	-29.5% 3.610	178.5% 2.809	-27.0% 4.216	-24.1% 3.342	16.2% 3.299	7.1% 3.545	5.2% 3.659	13.1% 3.717	4.9% 3.760	44.3% 8.884	7.1% 10.635
month-over-month % change	3.8%	-22.2%	50.1%	-4.3%	-1.3%	7.5%	1.2%	1.6%	1.2%		
year-over-year % change Misc Civil (Power, etc.)	17.4% 2.111	32.8% 2.754	14.1% 4.832	25.4% 3.427	32.5% 3.622	19.7% 3.232	29.5% 2.223	31.1% 2.308	29.0% 2.598	14.3% 5.881	19.7% 9.696
month-over-month % change	-64.8%	30.5%	75.5%	-1.1%	5.7%	-10.8%	-2.5%	3.8%	12.6%		
year-over-year % change TOTAL ENGINEERING (Civil)	-24.7% 18.519	58.8% 14.625	259.9% 21.909	108.5% 16.034	107.1% 16.562	64.9% 18.351	23.9% 16.922	23.0% 17.191	40.1% 17.650	-17.3% 42.373	64.9% 55.053
month-over-month % change	11.9%	-21.0%	49.8%	6.2%	3.3%	10.8%	2.0%	1.6%	2.7%		
year-over-year % change GRAND TOTAL	27.0% 78.693	28.4% 51.682	33.6% 70.937	35.8% 68.918	43.5% 67.332	29.9% 67.104	29.3% 79.415	28.6% 78.905	29.1% 78.881	21.7% 191.698	29.9%
month-over-month % change year-over-year % change	9.9% 25.5%	-34.3% -10.6%	37.3% -0.4%	-2.3% 11.9%	-2.3% 14.7%	-0.3% 5.0%	1.7% 20.5%	-0.6% 18.2%	0.0% 17.8%	12.7%	5.0%
NON-RES BLDG + ENGINEERING	57.249	32.847	47.624	47.209	46.883	45.907	49.453	49.729	50.536	101.524	137.721
month-over-month % change year-over-year % change	13.2% 68.1%	-42.6% 11.2%	45.0% 25.5%	3.9% 47.0%	-0.7% 53.2%	-2.1% 35.7%	4.1% 40.3%	0.6% 38.7%	1.6% 40.7%	12.7%	35.7%